INTERNATIONAL SEARCH REPORT

PCT/GB2004/004890

A. CLASSIFIC	CATION OF SUBJECT MATTER
IPC 7	CATION OF SUBJECT MATTER E21B34/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

ENTS CONSIDERED TO BE RELEVANT	
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to daim No.
US 6 533 037 B2 (ESLINGER DAVID M ET AL) 18 March 2002 (2002-03-18) column 3, line 27 - column 4, line 26; figures 1-2C	1-6,10
US 2 698 586 A (STANLEY ALONZO F ET AL) 4 January 1955 (1955-01-04) column 4, line 21 - column 4, line 27; figures 2-8	1-6,10
US 4 420 044 A (PULLIN ET AL) 13 December 1983 (1983-12-13) abstract; figures 2,4	1,10
US 5 862 864 A (WHITEFORD ET AL) 26 January 1999 (1999-01-26) claim 1; figures 1c,6c	1,10
	US 6 533 037 B2 (ESLINGER DAVID M ET AL) 18 March 2002 (2002-03-18) column 3, line 27 - column 4, line 26; figures 1-2C US 2 698 586 A (STANLEY ALONZO F ET AL) 4 January 1955 (1955-01-04) column 4, line 21 - column 4, line 27; figures 2-8 US 4 420 044 A (PULLIN ET AL) 13 December 1983 (1983-12-13) abstract; figures 2,4 US 5 862 864 A (WHITEFORD ET AL) 26 January 1999 (1999-01-26) claim 1; figures 1c,6c

Further documents are listed in the continuation of box C.	γ Patent family members are listed in annex.		
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	To later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention To document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone To document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. To document member of the same patent family		
Date of the actual completion of the international search 25 February 2005	Date of mailing of the international search report 08/03/2005		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Manolache, I		

INTERNATIONAL SEARCH REPORT

PCT/GB2004/004890

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2001/054505 A1 (CARMODY MICHAEL A ET AL) 27 December 2001 (2001–12–27) the whole document	Relevant to claim No.

5

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/GB2004/004890

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6533037	B2	30-05-2002	US CA GB GB NO	2002062963 A1 2361284 A1 2369632 A ,B 2384019 A ,B 20015805 A	30-05-2002 29-05-2002 05-06-2002 16-07-2003 30-05-2002
US 2698586	Α	04-01-1955	NONE		
US 4420044	A	13-12-1983	NONE		
US 5862864	A	26-01-1999	GB	2297572 A ,B	07-08-1996
US 2001054505	A1	27-12-2001	USS USS AU CAA CAA GB GB GB NOOO WO	6334486 B1 6260616 B1 5906238 A 2001054504 A1 2002027002 A1 728634 B2 2722897 A 2221152 A1 2450223 A1 2450225 A1 2450408 A1 2450419 A1 2348662 A ,B 2348452 A ,B 2348453 A ,B 2348453 A ,B 2348453 A ,B 2348663 A ,B 2320731 A ,B 975498 A 20023982 A 20023983 A 9737102 A2	01-01-2002 17-07-2001 25-05-1999 27-12-2001 07-03-2002 11-01-2001 22-10-1997 09-10-1997 09-10-1997 09-10-1997 09-10-1997 11-10-2000 27-09-2000 04-10-2000 04-10-2000 01-07-1998 28-11-1997 28-11-1997 09-10-1997